

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-17. (canceled)

18. (previously presented) A method for manufacturing a product which includes the steps of:

a) engaging an open cell polymeric foam element with at least a first perforated roller and a second perforated roller;

b) feeding a binder through at least the first roller so that compression between the first and second rollers forces penetration of the binder into the open cells of the foam element so as to impregnate the binder into the foam element, and the binder penetrates and becomes contained in the open cells of the foam element;

c) shaping the foam element by molding, pressing or cutting; and

d) allowing the binder to set to form the product.

19. (previously presented) A method according to claim 18 wherein the foam element includes a flexible open cell polyurethane foam in the density range 7 to 20 kg/m³.

20. (previously presented) A method according to claim 18 wherein the first roller includes a perforated surface through which the binder is delivered.

21. (previously presented) A method according to claim 20 wherein the first roller includes a feed passage where through the binder moves to the perforated surface.

22. (previously presented) A method according to claim 18 wherein the binder is selected from:

- i) an hydraulic binder slurry;
- ii) a mixture of a pozzolan and either lime or Portland cement in the form of a slurry;
- iii) a synthetic geopolymer precursor slurry; and
- iv) a thermoplastic material in liquid form.

23. (previously presented) A method according to claim 22 wherein the hydraulic binder slurry is selected from:

- i) alpha or beta hemihydrates of calcium sulphates;
- ii) Portland cement;
- iii) calcium aluminate;
- iv) a pozzolan with lime or with Portland cement;
- v) magnesium oxichloride; and
- vi) magnesium oxisulphate.

24. (previously presented) A method according to claim 18 which includes the step of compressing the foam element.

25. (previously presented) A method according to claim 18 which includes the step of shaping the foam element only by pressing.

26-27. (canceled)

28. (previously presented) A method according to claim 18 which includes the step of drying the binder impregnated foam element in a drier.

29. (previously presented) A method according to claim 18 wherein the first roller is a perforated hollow tube feed roller that includes a solid stationary core.

30. (previously presented) A method according to claim 29 wherein the solid stationary core includes feed conduits for conveying the binder to the roller.

31. (previously presented) A method according to claim 29 wherein the solid core includes a feed passage for feeding the binder to a perforated surface.

32. (previously presented) A method according to claim 18 wherein the second roller is a perforated hollow tube feed roller that includes a solid stationary core.

33. (previously presented) A method according to claim 32 wherein the solid stationary core includes feed conduits for conveying the binder to the roller.

34. (previously presented) A method according to claim 32 wherein the solid core includes a feed passage for feeding the binder to a perforated surface.

35. (canceled)

36. (new) A method for manufacturing a product which includes the steps of:

a) engaging an open cell polyurethane foam element with at least a first perforated roller and a second perforated roller, the polyurethane foam element including flexible open cell foam in a density range of 6 to 40 kg/m³;

b) feeding a binder through at least the first roller so that compression between the first and second rollers forces penetration of the binder into the open cells of the foam element so as to impregnate the binder into the foam element, and the

binder penetrates and becomes contained in the open cells of the foam element;

c) shaping the foam element by molding, pressing or cutting; and

d) allowing the binder to set to form the product.

37. (new) A method according to claim 36 wherein the flexible open cell foam density range is 7 to 20 kg/m³.

38. (new) A method according to claim 36 wherein the flexible open cell foam density range is 7 to 12 kg/m³.

39. (new) A method according to claim 36 wherein the binder contains gypsum, and the product is a core of a door having a dry density range of 250 to 400 kg/m³, an acoustic ceiling tile having a dry density range of 200 to 300 kg/m³ or a thermal insulation panel having a dry density range of 100 to 175 kg/m³.

40. (new) A method according to claim 36 wherein the binder contains Portland cement, and the product is a siding having a dry density of about 800 kg/m³, splash backs having a dry density of about 900 kg/m³, corrugated roof sheeting having a dry density of about 1200 kg/m³, a roof tile having a dry density

in a range of 1200 to 1500 kg/m³ or a u-section gutter having a dry density of about 400 kg/m³.